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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,506	11/30/2001	David P. Burgess	SC11732TS	6521
23125	7590	10/26/2004	EXAMINER	
FREESCALE SEMICONDUCTOR, INC. LAW DEPARTMENT 7700 WEST PARMER LANE MD:TX32/PL02 AUSTIN, TX 78729			PATEL, NIMESH G	
			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 10/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/998,506

Applicant(s)

BURGESS, DAVID P.

Examiner

Nimesh G Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7-10, 16 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-6, 11-15 and 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7-10, 16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al.('785), hereinafter referred to as Stone.

3. Regarding claim 1, Stone discloses a method for executing an interrupt in a data processing system comprising the steps of: fetching a conditional store instruction that is conditional upon a reservation(Store Contingent; Column 9, Lines 57-60) ; receiving notice that an interrupt is pending in the data processing system; invalidating the reservation in response to receiving the notice, wherein invalidating the reservation causes the conditional store instruction to finish; and processing the interrupt(Column 10, Lines 44-52; Column 15, Lines 32-36; The interrupt invalidates the reservation, the interrupt is processed, and the conditional store(store-contingent instruction) is finished).

4. Regarding claim 7, Stone discloses a method, wherein the data processing system has one or more processors(Figure 1, 21).

5. Regarding claim 8, Stone discloses a method, wherein the conditional store instruction is an instruction that requires a corresponding reservation of a memory location, wherein the corresponding reservation was established by a previously executed load and reserve instruction(Column 9, Lines 54-56).

6. Regarding claim 9, Stone discloses a method, wherein the step of setting a reservation related to the conditional store instruction comprises setting an address and a valid bit in a

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reservation register corresponding to a location in a memory for the conditional store instruction(Column 8, Lines 61-63; Column 9, Lines 3-6).

7. Regarding claim 10, Stone discloses a data processing system, comprising: a processor for executing instructions(Figure 1, 21), the processor comprising: a memory unit(Figure 1, 24); an instruction dispatch unit for fetching, decoding, and issuing a conditional store instruction(Figure 1, 23; Column 9, Line 57, Store Contingent instruction is issued); and a reservation register(Figure 1, 26) for storing a reservation corresponding to a location in the memory unit to be used as a target for the conditional store instruction(Column 6, Line 60-Column 7, Line 3), wherein in response to the data processing system receiving an interrupt, the reservation is cancelled(Column 15, Lines 32-36).

8. Regarding claim 16, Stone discloses a data processing system comprising: a system bus(Figure 1, 20); a memory(Figure 1, 25) coupled to the system bus; a first processor(Figure 1, 21, in dotted lines), coupled to the system bus, for executing instructions, the first processor comprising: a first instruction dispatch unit for fetching, decoding, and issuing a first conditional store instruction(Figure 1, 23; Column 9, Line 57, Store Contingent instruction is issued); and a first reservation register(Figure 1, 26) for storing a first reservation corresponding to a location in the memory to be used as a target for the first conditional store instruction(Column 6, Line 60-Column 7, Line 3), wherein in response to the first processor receiving an interrupt, the first reservation is cancelled(Column 15, Lines 32-36); and a second processor(Figure 1, 21, right side), coupled to the system bus, for executing instructions.

9. Regarding claim 20, Stone discloses a data processing system, wherein the second processor further comprising(Column 8, Lines 43-44): a second instruction dispatch unit for fetching, decoding, and issuing a second conditional store instruction(Figure 1, 23; Column 9, Line 57, Store Contingent instruction is issued); and a second reservation register(Figure 1, 26)

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for storing a second reservation corresponding to a location in the memory to be used as a target for the second conditional store instruction(Column 6, Line 60-Column 7, Line 3), wherein in response to the second processor receiving an interrupt, the second reservation is cancelled(Column 15, Lines 32-36).

### ***Allowable Subject Matter***

10. Claims 2-6, 11-15, and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

11. Applicant's arguments filed August 4, 2004 have been fully considered but they are not persuasive. Applicant argues that Stone does not discuss interrupts and that Stone does not disclose the method of invalidating a reservation upon receiving an interrupt. However, in Column 15, Lines 32-36, Stone discloses how interrupts are handled. Stone discloses receiving an interrupt and an interrupt invalidating a reservation. Therefore applicant's arguments are not persuasive.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

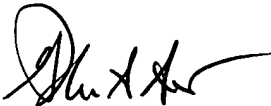
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nimesh G Patel whose telephone number is 571-272-3640. The examiner can normally be reached on M-F, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nimesh G Patel  
Examiner  
Art Unit 2112

NP NP  
October 25, 2004

  
Glenn A. Auve  
Primary Patent Examiner  
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